

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method comprising:
receiving, at a controller controlling device, a request to transmit data on a communications link from one of a plurality of embedded devices; and
determining which of the plurality of embedded devices asserted the request.
2. (Currently Amended) The method of claim 1, wherein the request to transmit data on the communications link is asserted by activating a link request pin.
3. (Currently Amended) The method of claim 1, wherein determining which of the plurality of embedded devices asserted the request comprises addressing one of the plurality of embedded devices and determining whether the addressed device has asserted a confirmation signal.
4. (Currently Amended) The method of claim 3, wherein the controller controlling device addresses each of the plurality of embedded devices by a round-robin method.
5. (Original) The method of claim 3, wherein the confirmation signal is asserted by activating a wait pin.
6. (Currently Amended) The method of claim 1, further comprising transferring permission to transmit data on the communications link from the controller controlling device to the requesting embedded device.
7. (Canceled).
8. (Currently Amended) The method of claim 1, wherein the plurality of embedded processor devices includes at least one baseband processor device.

9. (Currently Amended) The method of claim 1, wherein the plurality of embedded devices includes a general purpose processor device.

10. (Currently Amended) The method of claim 1, wherein the plurality of embedded devices include is in a radio telephone.

11. (Currently Amended) The method of claim 1, wherein the controller controlling device is operable to transmit data on the communications link ~~when it receives while receiving~~ the request to transmit data on the communications link from the requesting embedded device.

12. (Currently Amended) The method of claim 11, wherein the controller controlling device is operable to determine whether to transfer permission to transmit data on the communications link to the requesting embedded device.

13. (Currently Amended) A system[[,]] comprising:
a plurality of embedded devices;
~~a controller controlling device to control the plurality of embedded devices;~~
~~a multi-point communications link coupling the controller controlling device~~
to the plurality of embedded devices, wherein the controller controlling device has permission to transmit[[s]] data on the communications link; and
a link request pin electrically coupling the plurality of embedded devices, each of the plurality of embedded devices operable to request permission to transmit data on the communications link by activating the link request pin.

14. (Currently Amended) The system of claim 13, wherein the controller controlling device is operable to determine which of the plurality of embedded devices is requesting permission to transmit data on the communications link.

15. (Currently Amended) The system of claim 13, wherein each of the plurality of embedded devices comprises a confirmation pin to confirm a request to transmit data on the communications link.

16. (Currently Amended) The system of claim 15, wherein the controller controlling device is operable to address [[a]] one of the plurality of embedded devices and determine whether the addressed embedded device has asserted [[a]] the confirmation pin.

17. (Currently Amended) The system of claim 16, wherein the controller controlling device is operable to address[[es]] each of the plurality of embedded devices by a round-robin method.

18. (Currently Amended) The system of claim 13, wherein the controller controlling device is further operable to transfer permission to transmit data on the communications link to the a requesting embedded device.

19. (Canceled).

20. (Currently Amended) The system of claim 13, wherein the plurality of embedded processor devices includes at least one baseband processor device.

21. (Currently Amended) The system of claim 13, wherein the plurality of embedded devices includes a general purpose processor device.

22. (Currently Amended) The system of claim 13, wherein the plurality of embedded devices comprise is in a radio telephone.

23. (Currently Amended) The system of claim 13, wherein the controller controlling device is operable to transmit data on the communications link when it receives while receiving the request to transmit data on the communications link from a requesting embedded device.

24. (Currently Amended) The system of claim 23, wherein the controller controlling device is operable to determine whether to transfer permission to transmit data on the communications link to a requesting embedded device.

25. (Currently Amended) A method, comprising:

receiving a link request signal, for requesting permission to transmit data on a communications link, controlling a multi-point communications link at a controller controlling device from one of a plurality of embedded devices;

performing an arbitration to determine which one of the plurality of embedded devices is the requesting embedded device; and

~~when the requesting embedded device is addressed, receiving a confirmation signal at the controller controlling device from the requesting embedded device.~~

26. (Currently Amended) The method of claim 25, further comprising transferring the permission to transmit data on the communications link to the requesting embedded device.

27. (Currently Amended) The method of claim 25, wherein the arbitration comprises addressing ~~each~~ of the plurality of embedded devices by a round-robin method.

28. (New) The method of claim 1, wherein the communications link accommodates a data rate of at least one hundred megabits per second.

29. (New) The system of claim 20, wherein the at least one baseband processor device comprises a CDMA processor, WCDMA processor, Bluetooth processor, or IEEE 802.11 processor.

30. (New) A system comprising:

a plurality of embedded processor means for processing data, wherein each of the plurality of embedded processor means is operable to request permission to transmit data;

controlling means for transmitting data;

communications means, coupling the controlling means to the plurality of embedded processor means, for carrying data transmitted by the controlling means.

31. (New) The system of claim 30, wherein the controlling means is operable to determine which of the plurality of embedded processor means is requesting permission to transmit data on the communications means.

32. (New) The system of claim 30, wherein each of the plurality of processor means comprises confirmation means for confirming a request to transmit data on the communications means.

33. (New) The system of claim 32, wherein the controlling means is operable to address one of the plurality of processor means and determine whether the addressed processor means has asserted the confirmation means.

34. (New) The system of claim 33, wherein the controlling means is operable to address the plurality of processor means by a round-robin method.

35. (New) The system of claim 30, wherein the controlling means is further operable to transfer permission to transmit data on the communications means to a requesting processor means.

36. (New) The system of claim 30, wherein the plurality of processor means includes at least one baseband processor device.

37. (New) The system of claim 30, wherein the plurality of processor means includes a general purpose processor device.

38. (New) The system of claim 30, wherein the plurality of processor means is in a radio telephone.

39. (New) The system of claim 30, wherein the controlling means is operable to transmit data on the communications means while receiving the request to transmit data on the communications means.

40. (New) The system of claim 30, wherein the controlling means is operable to determine whether to transfer permission to transmit data on the communications means to a requesting processor means.

41. (New) A method comprising:

receiving, at a first device of a plurality of embedded devices, a request to transmit data on a communications link from a second device of the plurality of embedded devices, wherein the first device has permission to transmit data on the communications link; and

determining which of the plurality of embedded devices asserted the request.

42. (New) The method of claim 41, wherein the request to transmit data on the communications link is asserted by activating a link request pin.

43. (New) The method of claim 41, wherein determining which of the plurality of embedded devices asserted the request comprises addressing one of the plurality of embedded devices and determining whether the addressed device asserted a confirmation signal.

44. (New) The method of claim 43, wherein the first device addresses the plurality of embedded devices by a round-robin method.

45. (New) The method of claim 43, wherein the confirmation signal is asserted by activating a wait pin.

46. (New) The method of claim 41, further comprising transferring permission to transmit data on the communications link from the first device to the second device.

47. (New) The method of claim 46, wherein transferring permission to transmit data on the communications link further comprises transferring control of the communications link.

48. (New) The method of claim 41, wherein permission to transmit data on the communications link includes control of the communications link.

49. (New) The method of claim 41, wherein permission to transmit data on the communications link includes an ability to exclusively transmit data on the communications link.

50. (New) A system comprising:
a plurality of embedded devices;
a first device of the plurality of embedded devices operable to control transmission of data on a communications link, wherein the communications link couples the plurality of embedded devices, and the first device has permission to transmit data on the communications link; and
a link request pin electrically coupling the plurality of embedded devices, each of the plurality of embedded devices operable to request permission to transmit data on the communications link by activating the link request pin.

51. (New) The system of claim 50, wherein each of the plurality of embedded devices comprises a confirmation pin to confirm a request to control the communications link.

52. (New) The system of claim 51, wherein the first device is operable to address a second device of the plurality of embedded devices and determine whether the second device has asserted the confirmation pin.

53. (New) The system of claim 50, wherein the first device is further operable to transfer permission to transmit data on the communications link to a second device that is requesting permission to transmit data on the communications link.

54. (New) The system of claim 50, wherein permission to transmit data on the communications link includes control of the communications link.

55. (New) The system of claim 50, wherein permission to transmit data on the communications link includes an ability to exclusively transmit data on the communications link.

56. (New) A method comprising:
receiving a link request signal requesting permission to transmit data on a communications link at a first device of a plurality of embedded devices;
performing an arbitration to determine which one of the plurality of embedded devices initiated the link request signal; and

receiving a confirmation signal at the first device from a second device of the plurality of embedded devices, wherein the second device initiated the link request signal.

57. (New) The method of claim 56, further comprising transferring permission to transmit data on the communications link from the first device to the second device.

58. (New) The method of claim 57, wherein transferring permission to transmit data on the communications link further comprises transferring control of the communications link.

59. (New) The method of claim 56, wherein permission to transmit data on the communications link includes control of the communications link.

60. (New) The method of claim 56, wherein permission to transmit data on the communications link includes an ability to exclusively transmit data on the communications link.

61. (New) The method of claim 56, wherein the arbitration comprises addressing the plurality of embedded devices by a round-robin method.

62. (New) A system comprising:

a plurality of embedded processor means for processing data, wherein each of the plurality of embedded processor means is operable to request permission to transmit data;

first embedded processor means of the plurality of embedded processor means for controlling the transmission of data on a communications means;

communications means, coupling the plurality of embedded processor means, for carrying data transmitted by any one of the plurality of embedded processor means, wherein the first embedded processor means has permission to transmit data on the communications means.

63. (New) The system of claim 62, wherein each of the plurality of embedded processor means comprises confirmation means for confirming a request for permission to transmit data on the communications means.

64. (New) The system of claim 63, wherein the first embedded processor means is operable to address second embedded processor means of the plurality of embedded processor means and determine whether the second embedded processor means has asserted the confirmation means.

65. (New) The system of claim 62, wherein the first embedded processor means is further operable to transfer permission to transmit data on the communications means to a second embedded processor means that is requesting permission to transmit data on the communications means.

66. (New) The system of claim 62, wherein permission to transmit data on the communications means includes control of the communications means.

67. (New) The system of claim 62, wherein permission to transmit data on the communications means includes an ability to exclusively transmit data on the communications means.